



## **FIRESCOPE Radio Communications Guidelines**

**MACS 441-1**

**MULTI-AGENCY COORDINATION SYSTEM PUBLICATION  
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This document contains information relative to the Incident Command System (ICS) component of the National Interagency Incident Management System (NIIMS). This is the same Incident Command System developed by FIRESCOPE.

Additional information and documentation can be obtained from the following resources:

OES FIRESCOPE OCC  
Document Control  
2524 Mulberry Street  
Riverside, CA 92501-2200  
(951) 782-4174  
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[www.firescope.org](http://www.firescope.org)

## **FIRESCOPE RADIO COMMUNICATIONS GUIDELINES**

FIRESCOPE Radio Communications Guidelines are derived from the Cooperative Agreements for Use of Radio Frequencies between fire service agencies of California allowing for mutual use of radio channels during mutual aid efforts.

VHF Highband is the default radio frequency band utilized by the California fire service. There are seventy (70) specific channels that should be pre-programmed into all VHF radios utilized by fire service agencies providing mutual aid in California (see the FIRESCOPE STATEWIDE CHANNEL PLAN).

Fire service agencies whose normal dispatch system is on a band other than VHF Highband, should ensure that their mobile radios, portable radios, and dispatch centers are properly licensed and programmed to operate on the UHF and 800 MHz. interoperability channels contained within the FIRESCOPE STATEWIDE CHANNEL PLAN.

### **IMPORTANT COMMUNICATIONS ISSUES**

#### **Travel Net Change**

**CALIFORNIA TRAVEL NET channel is no longer to be used after January 1, 2007.** The California Emergency Services Radio System (CESRS) may be utilized as a travel net in the simplex, direct mode only by federal, state, and local government agencies. Strike Teams or other resources in travel status should use the "CESRS Direct" talk-around channel for line-of-sight communications. Use of CESRS repeaters is currently not authorized for use as a travel net unless an executed use agreement is in place with OES.

#### **Narrow-Banding**

ALL VHF radios used on Federal Government radio channels and some State of California radio channels should have already been re-programmed within the last three years to accommodate the transition to narrowbanding.

The National Telecommunications and Information Administration (the Federal Government's frequency manager) mandated that the federal agency VHF frequencies be narrow-banded by January 1, 2005. Although the FCC rules provide that most state and local government frequencies are not required to be narrow-banded until 2013, this migration has already affected state and local government agencies. California fire service agencies including CAL FIRE and OES are targeting 2010 for narrowbanding all statewide channels. All federal agency channels (including USFS, BLM, NPS and the NIFC National Incident Radio Support Cache radios) are now narrow-banded. In addition to the federal changes, certain State of California frequencies have been converted to narrowband operation.

It is imperative that qualified service personnel inspect all mobile and portable VHF radio communications equipment immediately in order to determine if it is capable of, and programmed for, narrow-band operation. Of particular importance is the inspection of all VHF radio equipment manufactured prior to January 1, 2000.

Any non-compliant radio equipment used on narrowband channels may present a ***life-safety hazard*** for all users.

Radios that are not capable of narrow-band technology should be completely taken out-of-service and not placed into service by another fire service agency (e.g. donations, personal volunteer use, etc.) Any radios returned to the vendor or disposed of as surplus should have all programming deleted or crystals removed.

For additional information, see the Narrowband Migration Plan on the Communications Specialist Group page of the FIRESCOPE website.

## **GUIDELINES**

1. While numerous radio channels/talk-groups can be pre-programmed into radios, it is important to note that in order to transmit on those channels/talk-groups (including channels listed in the FIRESCOPE STATEWIDE CHANNEL PLAN) the user: 1) must be authorized by the FCC or NTIA to transmit on those frequencies, 2) must have a radio use agreement or Memorandum of Understanding with the agency which is licensed for the channels, or 3) must be assigned to an incident with that channel/talk-group listed on the Incident Radio Communications Plan (ICS Form 205).
2. Any agency requesting mutual aid will advise responding agencies of an initial contact channel/talk-group for the incident. Generally, the initial contact channel will be WHITE 1. Incident Communications Centers (ICC's) and Staging Area Managers should monitor WHITE 1 or another specified initial contact channel/talk-group to assist resources arriving at the incident.
3. Local policy will dictate radio channel/talk-group assignments for an incident until a Communications Unit Leader (COML) establishes the Incident Radio Communications Plan (ICS Form 205).
4. The Incident Commander or, if assigned, the Communications Unit Leader is responsible for managing assigned radio channels/talk-groups and must clear the use of local, state and federal frequencies with the controlling agencies prior to inclusion in an Incident Radio Communications Plan (ICS Form 205).
5. Clear text (plain English) should be used for all communications. CODES SHALL NOT BE USED. Standardized channel/talk-group names should be stated, e.g. "WHITE 2", or "NIFC TAC 2". Channel/talk-group numbers corresponding to how a specific radio is programmed should not be used (e.g. "Channel 1", or "Channel A14".)
6. Data communications (i.e. automated or push button status keeping for "computer aided dispatch" [CAD] systems) shall not be used outside the local agency's normal area of operation.
7. Radio programming that enables data signaling (e.g. MDC1200 push-to-talk identification) is prohibited on interoperability channels (e.g. WHITE 1, WHITE 2, WHITE 3, etc.).

8. Vehicular repeater systems (mobile extenders) shall not be used outside the local agency's normal area of operation.
9. The use of gateways (including portable, mobile or fixed) shall be limited to the smallest geographical area of coverage to meet the temporary needs of the incident. Gateways shall only be used on channels/talk-groups that are specifically licensed for that type of operation (e.g. temporary mobile relay) and must be specifically authorized based upon an approved Incident Radio Communications Plan (ICS Form 205) or be recognized as a fixed gateway, included in the California Statewide Communications Interoperability Plan (CalSCIP).
10. Family Radio Service (FRS) radios are prohibited from use on Federal and State of California incidents. Use of any non-public safety radio (e.g. FRS, etc.) or use of a frequency/talk-group not identified on the Incident Radio Communications Plan (ICS Form 205) is prohibited on any incident.
11. The use of any frequency outside the agency's normal, licensed area of operation is prohibited by FCC rules and will likely cause harmful interference to other users (e.g. Strike Teams using a local tactical channel in a distant part of the state).

### **FIRESCOPE STATEWIDE CHANNEL PLAN**

The FIRESCOPE Statewide Channel Plan was developed to assist California Fire Service agencies in buying and programming synthesized radios so as to maximize their effectiveness for mutual aid responses.

Regardless of the radio system used on a daily basis, all California Fire Service agencies should maintain an adequate number of VHF mobile and portable radios to support mutual aid operations. In addition to the VHF interoperability channels, UHF and 800 MHz. interoperability channels are also available to support mutual aid and all-risk incidents.

### **USAGE NOTES for ICS 217A COMMUNICATIONS RESOURCE WORKSHEETS:**

1. The WHITE channels require individual agency licensing from the FCC. WHITE channel operational policies are outlined in OES Fire Operations Bulletin #28 and/or the California Statewide Communications Interoperability Plan (CalSCIP). Contact OES Fire and Rescue for information.
2. Use of CALCOP is subject to the CALCOP Plan, under an executed CALCOP agreement with OES and/or in accordance with the California Statewide Communications Interoperability Plan (CalSCIP). Contact OES Telecommunications for information.

3. Federal and State of California agencies use the following sixteen standard tones for repeater access. These must be included for repeater use. These tones must be programmed on the transmit side **only** of mobile and portable radios.

1. 110.9	2. 123.0	3. 131.8	4. 136.5
5. 146.2	6. 156.7	7. 167.9	8. 103.5
9. 100.0	10. 107.2	11. 114.8	12. 127.3
13. 141.3	14. 151.4	15. 162.2	16. 192.8
4. **Important**- Some radios do not function properly on the following channels: V-CALL, V-TAC 2, and V-TAC 4. Note: Communications Unit Leaders should not assign those specific channels for incident use if it might be possible that Bendix-King EPH radios (including the current NIFC, CDF, and OES cache radios) might be utilized on their incident. Prior to use on an incident it is important to determine whether or not another manufacturer's radio models have V-CALL, V-TAC 2 or V-TAC 4 functioning problems.
5. Transmitters are to be set to lowest available power setting on these channels (V-TAC's, U-TAC's, CDF Tacticals, NIFC Commands, NIFC Tacticals, etc.).
6. Use of the NIFC Commands and NIFC Tacticals is based upon an approved Incident Radio Communications Plan (ICS Form 205). Communications Unit Leaders must obtain authorization for the use of these channels through the NIFC Communications Duty Officer.
7. For use based upon an approved Incident Radio Communications Plan (ICS Form 205). Communications Unit Leaders must obtain authorization for the use of these channels through the CDF Southern Region/South Operations GACC or Northern Region Command Center/North Operations GACC.
8. Specific channel usage guidelines are still being determined, and will be published in the California Statewide Communications Interoperability Plan (CalSCIP). Until the CalSCIP is finalized, these channels are for inter-agency / inter-discipline use. No single-agency, routine communications permitted. Tone 6 (156.7 Hz.) is used as the common tone (mobile transmit side only at this time).
9. These channels are for inter-agency/inter-discipline use. No single-agency, routine communications permitted. Tone 6 (156.7 Hz.) is used as the common tone (transmit and receive).
10. Use as a fire and fire-based EMS single-agency or strike-team common channel is permitted. Tone 6 (156.7 Hz.) is used as the common tone (transmit and receive). Use is subject to an executed use agreement with OES until such time as the California Statewide Communications Interoperability Plan (CalSCIP) is finalized. Contact OES Telecommunications for information.

11. **Not available for use** in Imperial, Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, and Ventura counties.
12. AIR GUARD – 168.625 MHz. – A National Interagency Air Guard frequency for government aircraft assigned to incidents. It is used for emergency communications by aviation. A separate receiver is required to permit continuous monitoring in aircraft. Transmitters on this channel should encode a CTCSS of 110.9 Hz. All Incident Radio Communications Plans (ICS Form 205) on incidents that use federal or CAL FIRE aircraft should have AIR GUARD programmed in the last available channel slot of cache portable radios. Communications Unit Leaders should consider placing AIR GUARD in channel slot 14 (Bendix-King EPH), channel slot 16 (Bendix-King GPH & DPH and other manufacturers who use 16 channels in a zone/group), and channel slot 20 (Bendix-King GPH-CMD and DPH-CMD).

AIR GUARD is restricted to the following use:

- a. Air-to-air emergency contact and coordination.
- b. Ground-to-air emergency contact.
- c. Initial call, recall, and re-direction of aircraft when no other contact frequency is available.

13. CALIFORNIA TRAVEL NET channel is no longer to be used after January 1, 2007. The California Emergency Services Radio System (CESRS) may be utilized as a travel net in the simplex, direct mode only by federal, state, and local government agencies. Strike Teams or other resources in travel status should use the “CESRS Direct” talk-around channel for line-of-sight communications. Use of CESRS repeaters is currently not authorized for use as a travel net unless an executed use agreement is in place with OES.

NOTE: For additional information concerning the appropriate usage of channels identified in the FIRESCOPE STATEWIDE CHANNEL PLAN, contact OES Telecommunications or your respective Communications Unit Leader (COML).

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET						Frequency Band			Description	
ICS 217A 031207				Page 1 of 6		VHF HIGHBAND			FIRESCOPE STATEWIDE CHANNEL PLAN – 2008	
Channel Configuration	Channel Name/Trunked Radio System Talk-group	Eligible Users	RX Freq N or W	RX Tone/NAC	TX Freq N or W	Tx Tone/NAC	Mode	Remarks		
Simplex – Base/Mo	<b>WHITE 1</b>	Fire	154.2800 W	None	Simplex	None	A	Usage Note 1		
Simplex – Mo only	<b>WHITE 2</b>	Fire	154.2650 W	None	Simplex	None	A	Usage Note 1		
Simplex – Mo only	<b>WHITE 3</b>	Fire	154.2950 W	None	Simplex	None	A	Usage Note 1		
Simplex – Mo only	<b>CALCORD</b>	Any Public Safety	156.0750 W	None	Simplex	None	A	Usage Note 2		
Simplex – Base/Mo	<b>VCALL10</b>	Any Public Safety	155.7525 N	None	Simplex	156.7	A	Usage Note 4, 8		
Simplex – Base/Mo	<b>VTAC11</b>	Any Public Safety	151.1375 N	None	Simplex	156.7	A	Usage Note 5, 8		
Simplex – Base/Mo	<b>VTAC12</b>	Any Public Safety	154.4525 N	None	Simplex	156.7	A	Usage Note 4, 5, 8		
Simplex – Base/Mo	<b>VTAC13</b>	Any Public Safety	158.7375 N	None	Simplex	156.7	A	Usage Note 5, 8		
Simplex – Base/Mo	<b>VTAC14</b>	Any Public Safety	159.4725 N	None	Simplex	156.7	A	Usage Note 4, 5, 8		
Simplex – Mo only	<b>OES 1</b>	Fire	154.1600 W	None	Simplex	None	A			
Simplex – Mo only	<b>OES 2</b>	Fire	154.2200 W	None	Simplex	None	A			
Simplex – Mo only	<b>CESRS D</b>	Travel Net	153.7550 W	None	153.7550 W	None	A	Usage Note 13		
Repeater Pair	<b>CESRS</b>	Authorized Users	153.7550 W	None	154.9800 W	Multi	A	Usage Note 3, 13		
Repeater Pair	<b>CDF C1</b>	Fire	151.3550 W	None	159.3000 W	Multi	A	Usage Note 3, 7		
Repeater Pair	<b>CDF C2</b>	Fire	151.2650 W	None	159.3300 W	Multi	A	Usage Note 3, 7		
Repeater Pair	<b>CDF C3</b>	Fire	151.3400 W	None	159.3450 W	Multi	A	Usage Note 3, 7		
Repeater Pair	<b>CDF C4</b>	Fire	151.4000 W	None	159.3750 W	Multi	A	Usage Note 3, 7		
Repeater Pair	<b>CDF C5</b>	Fire	151.3700 W	None	159.2850 W	Multi	A	Usage Note 3, 7		
Repeater Pair	<b>CDF C6</b>	Fire	151.2500 W	None	159.3600 W	Multi	A	Usage Note 3, 7		
Repeater Pair	<b>CDF C7</b>	Fire	151.4600 W	None	159.3900 W	Multi	A	Usage Note 3, 7		
Repeater Pair	<b>CDF C8</b>	Fire	151.4450 W	None	159.3450 W	Multi	A	Usage Note 3, 7		
Repeater Pair	<b>CDF C9</b>	Fire	151.1750 W	None	159.4500 W	Multi	A	Usage Note 3, 7		
Repeater Pair	<b>CDF C10</b>	Fire	151.1900 W	None	159.2250 W	Multi	A	Usage Note 3, 7		
Simplex – Mo only	<b>CDF T1</b>	Fire	151.1450 N	None	Simplex	None	A	Usage Note 5, 7		
Simplex – Mo only	<b>CDF T2</b>	Fire	151.1600 W	None	Simplex	None	A	Usage Note 5, 7		

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, portable or mobile radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET ICS 217A 031207						Frequency Band <b>VHF HIGHBAND</b>			Description <b>FIRESCOPE STATEWIDE CHANNEL PLAN – 2008</b>	
Channel Configuration	Channel Name/Trunked Radio System Talk-group	Eligible Users	RX Freq	N or W	RX Tone/NAC	TX Freq	N or W	Tx Tone/NAC	Mode	Remarks
Simplex – Mo only	<b>CDF T3</b>	Fire	151.1750	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T4</b>	Fire	151.1900	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T5</b>	Fire	151.2500	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T6</b>	Fire	151.3250	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T7</b>	Fire	151.3400	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T8</b>	Fire	151.3700	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T9</b>	Fire	151.3850	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T10</b>	Fire	151.4000	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T11</b>	Fire	151.4450	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T12</b>	Fire	151.4600	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T13</b>	Fire	151.4750	N	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T14</b>	Fire	159.2250	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T15</b>	Fire	159.2700	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T16</b>	Fire	159.2850	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T17</b>	Fire	159.3150	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T18</b>	Fire	159.3450	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T19</b>	Fire	159.3600	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T20</b>	Fire	159.3750	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T21</b>	Fire	159.3900	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T22</b>	Fire	159.4050	W	None	Simplex	None		A	Usage Note 5, 7
Simplex – Mo only	<b>CDF T23</b>	Fire	159.4500	W	None	Simplex	None		A	Usage Note 5, 7
Repeater Pair	<b>NIFC C1</b>	Fire	168.7000	N	None	170.9750	N	None	A	Usage Note 3, 5, 6
Repeater Pair	<b>NIFC C2</b>	Fire	168.1000	N	None	170.4500	N	None	A	Usage Note 3, 5, 6
Repeater Pair	<b>NIFC C3</b>	Fire	168.0750	N	None	170.4250	N	None	A	Usage Note 3, 5, 6
Repeater Pair	<b>NIFC C4</b>	Fire	166.6125	N	None	168.4000	N	None	A	Usage Note 3, 5, 6

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, portable or mobile radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET ICS 217A 031207						Frequency Band <b>VHF</b> <b>HIGHBAND</b>			Description		
									<b>FIRESCOPE STATEWIDE CHANNEL PLAN – 2008</b>		
	Channel Configuration	Channel Name/Trunked Radio System Talk-group	Eligible Users	RX Freq	N or W	RX Tone/NAC	TX Freq	N or W	Tx Tone/NAC	Mode	Remarks
	Repeater Pair	<b>NIFC C5</b>	Fire	167.1000	N	None	169.7500	N	None	A	Usage Note 3, 5, 6
	Repeater Pair	<b>NIFC C6</b>	Fire	168.4750	N	None	173.8125	N	None	A	Usage Note 3, 5, 6
	Repeater Pair	<b>NIFC C7</b>	Fire	162.9625	N	None	171.7875	N	None	A	Usage Note 3, 5, 6
	Simplex – Mo only	<b>NIFC T1</b>	Fire	168.0500	N	None	Simplex	None	A	Usage Note 5, 6	
	Simplex – Mo only	<b>NIFC T2</b>	Fire	168.2000	N	None	Simplex	None	A	Usage Note 5, 6	
	Simplex – Mo only	<b>NIFC T3</b>	Fire	168.6000	N	None	Simplex	None	A	Usage Note 5, 6	
	Simplex – Mo only	<b>NIFC T4</b>	Fire	164.1375	N	None	Simplex	None	A	Usage Note 5, 6	
	Simplex – Mo only	<b>NIFC T5</b>	Fire	166.7250	N	None	Simplex	None	A	Usage Note 5, 6	
	Simplex – Mo only	<b>NIFC T6</b>	Fire	166.7750	N	None	Simplex	None	A	Usage Note 5, 6	
	Simplex – Mo only	<b>NIFC T7</b>	Fire	168.2500	N	None	Simplex	None	A	Usage Note 5, 6	
	Simplex – Mo only	<b>FSR5 T4</b>	Fire	173.9125	N	None	Simplex	None	A	Usage Note 5, 7	
	Simplex – Mo only	<b>FSR5 T5</b>	Fire	173.9625	N	None	Simplex	None	A	Usage Note 5, 7	
	Simplex – Mo only	<b>FSR5 T6</b>	Fire	173.9875	N	None	Simplex	None	A	Usage Note 5, 7	
	Simplex – Air/Mo	<b>AIRGUARD</b>	Fire	168.6250	N	None	Simplex	110.9	A	Usage Note 12	
	Simplex – Air/Mo	<b>FS A/G</b>	Fire	170.0000	N	None	Simplex	None	A	Usage Note 5, 6	
	Simplex – Air/Mo	<b>BLM A/G</b>	Fire	167.9500	N	None	Simplex	None	A	Usage Note 5, 6	
	Simplex – Air/Mo	<b>CDF A/G</b>	Fire	151.2200	N	None	Simplex	None	A	Usage Note 5	
	Simplex – Mo only	<b>168.350</b>	Federal Agencies	168.3500	N	None	Simplex	None	A	Usage Note 5, 6	
	Simplex – Mo only	<b>163.100</b>	Federal Agencies	163.1000	N	None	Simplex	None	A	Usage Note 5, 6	
	Simplex – Mo only	<b>168.550</b>	Federal Agencies	168.5500	N	None	Simplex	None	A	Usage Note 5, 6	

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, portable or mobile radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET						Frequency Band		Description		
ICS 217A 031207						UHF		FIRESCOPE STATEWIDE CHANNEL PLAN – 2008		
Channel Configuration	Channel Name/Trunked Radio System Talk-group	Eligible Users	RX Freq	N or W	RX Tone/NAC	TX Freq	N or W	Tx Tone/NAC	Mode	Remarks
Repeater Pair	<b>UCALL40</b>	Any Public Safety	453.2125	N	None	458.2125	N	156.7	A	Usage Note 8
Repeater Pair	<b>UTAC41</b>	Any Public Safety	453.4625	N	None	458.4625	N	156.7	A	Usage Note 5, 8
Repeater Pair	<b>UTAC42</b>	Any Public Safety	453.7125	N	None	458.7125	N	156.7	A	Usage Note 5, 8
Repeater Pair	<b>UTAC43</b>	Any Public Safety	453.8625	N	None	458.8625	N	156.7	A	Usage Note 5, 8
Simplex – Base/Mo	<b>UCALL40D</b>	Any Public Safety	453.2125	N	None	Simplex		156.7	A	Usage Note 8
Simplex – Base/Mo	<b>UTAC41D</b>	Any Public Safety	453.4625	N	None	Simplex		156.7	A	Usage Note 5, 8
Simplex – Base/Mo	<b>UTAC42D</b>	Any Public Safety	453.7125	N	None	Simplex		156.7	A	Usage Note 5, 8
Simplex – Base/Mo	<b>UTAC43D</b>	Any Public Safety	453.8625	N	None	Simplex		156.7	A	Usage Note 5, 8

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, portable or mobile radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET ICS 217A 031207						Frequency Band 800 MHz. (prior to Re- banding)			Description FIRESCOPE STATEWIDE CHANNEL PLAN – 2008	
Channel Configuration	Channel Name/Trunked Radio System Talk-group	Eligible Users	RX Freq	N or W	RX Tone/NAC	TX Freq	N or W	Tx Tone/NAC	Mode	Remarks
Repeater Pair	<b>I-CALL</b>	Any Public Safety	866.0125	W	156.7	821.0125	W	156.7	A	Usage Note 9
Repeater Pair	<b>I-TAC1</b>	Any Public Safety	866.5125	W	156.7	821.5125	W	156.7	A	Usage Note 9
Repeater Pair	<b>I-TAC2</b>	Any Public Safety	867.0125	W	156.7	822.0125	W	156.7	A	Usage Note 9
Repeater Pair	<b>I-TAC3</b>	Any Public Safety	867.5125	W	156.7	822.5125	W	156.7	A	Usage Note 9
Repeater Pair	<b>I-TAC4</b>	Any Public Safety	868.0125	W	156.7	823.0125	W	156.7	A	Usage Note 9
Repeater Pair	<b>FIREMARS</b>	Fire & Fire based- EMS	868.9875	W	156.7	823.9875	W	156.7	A	Usage Note 10
Repeater Pair	<b>FIREMARS 2</b>	Fire & Fire based- EMS	866.9125	W	156.7	821.9125	W	156.7	A	Usage Note 10, 11
Simplex – Base/Mo	<b>I-CALLD</b>	Any Public Safety	866.0125	W	156.7	Simplex	156.7	A	Usage Note 9	
Simplex – Base/Mo	<b>I-TAC1D</b>	Any Public Safety	866.5125	W	156.7	Simplex	156.7	A	Usage Note 9	
Simplex – Base/Mo	<b>I-TAC2D</b>	Any Public Safety	867.0125	W	156.7	Simplex	156.7	A	Usage Note 9	
Simplex – Base/Mo	<b>I-TAC3D</b>	Any Public Safety	867.5125	W	156.7	Simplex	156.7	A	Usage Note 9	
Simplex – Base/Mo	<b>I-TAC4D</b>	Any Public Safety	868.0125	W	156.7	Simplex	156.7	A	Usage Note 9	
Simplex – Base/Mo	<b>FIREMARS D</b>	Fire & Fire based- EMS	868.9875	W	156.7	Simplex	156.7	A	Usage Note 10	
Simplex – Base/Mo	<b>FIREMARS 2D</b>	Fire & Fire based- EMS	866.9125	W	156.7	Simplex	156.7	A	Usage Note 10, 11	
NOTE: After being re-banded, the NPSPAC national interoperability channels will be 15 MHz. lower. The California Statewide Interoperability Executive Committee (CALSIEC) is considering the adoption of a national Interoperability channel naming standard.										

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, portable or mobile radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET ICS 217A 031207					Frequency Band 800 MHz. (post- Rebanding)		Description FIRESCOPE STATEWIDE CHANNEL PLAN – 2008			
Channel Configuration	Channel Name/Trunked Radio System Talk-group	Eligible Users	RX Freq	N or W	RX Tone/NAC	TX Freq	N or W	Tx Tone/NAC	Mode	Remarks
Repeater Pair	<b>8CALL90</b>	Any Public Safety	851.0125 W		156.7	806.0125 W		156.7	A	Usage Note 9
Repeater Pair	<b>8TAC91</b>	Any Public Safety	851.5125 W		156.7	806.5125 W		156.7	A	Usage Note 9
Repeater Pair	<b>8TAC92</b>	Any Public Safety	852.0125 W		156.7	807.0125 W		156.7	A	Usage Note 9
Repeater Pair	<b>8TAC93</b>	Any Public Safety	852.5125 W		156.7	807.5125 W		156.7	A	Usage Note 9
Repeater Pair	<b>8TAC94</b>	Any Public Safety	853.0125 W		156.7	808.0125 W		156.7	A	Usage Note 9
Repeater Pair	<b>CAFIRE1</b>	Fire & Fire based- EMS	853.9875 W		156.7	808.9875 W		156.7	A	Usage Note 10
Repeater Pair	<b>CAFIRE2</b>	Fire & Fire based- EMS	851.9125 W		156.7	806.9125 W		156.7	A	Usage Note 10, 11
Simplex – Base/Mo	<b>8CALL90D</b>	Any Public Safety	851.0125 W		156.7	Simplex		156.7	A	Usage Note 9
Simplex – Base/Mo	<b>8TAC91D</b>	Any Public Safety	851.5125 W		156.7	Simplex		156.7	A	Usage Note 9
Simplex – Base/Mo	<b>8TAC92D</b>	Any Public Safety	852.0125 W		156.7	Simplex		156.7	A	Usage Note 9
Simplex – Base/Mo	<b>8TAC93D</b>	Any Public Safety	852.5125 W		156.7	Simplex		156.7	A	Usage Note 9
Simplex – Base/Mo	<b>8TAC94D</b>	Any Public Safety	853.0125 W		156.7	Simplex		156.7	A	Usage Note 9
Simplex – Base/Mo	<b>CAFIRE1D</b>	Fire & Fire based- EMS	853.9875 W		156.7	Simplex		156.7	A	Usage Note 10
Simplex – Base/Mo	<b>CAFIRE2D</b>	Fire & Fire based- EMS	851.9125 W		156.7	Simplex		156.7	A	Usage Note 10, 11

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, portable or mobile radio. Repeater and base stations must be programmed with the Rx and Tx reversed.